



# **FireNET L@titude** ANALOG ADDRESSABLE FIRE ALARM CONTROL PANEL



# FireNET L@titude

# Analog Addressable Fire Alarm Control Panels



**Single Aperture** 



**Double Aperture** Includes Zone LED Module and Printer

# **Standard Features**

- UL Listed (Tenth Edition) and FM Approved
- 2 to 8 loop or 2 to 16 loop versions
- 400mA loop current
- 400 sub-address points per loop (800 per loop module)
- 4 programmable NACs; Class B or 2 Class A
- Multiple internal NAC synchronization protocols
- 5.25 A or 10.25 A power supply options
- 3 programmable inputs and 5 programmable relay outputs
- 7 inch, full-color resistive touch screen with intuitive user interface
- Up to 24 programmable soft "function keys"
- Up to 64 user login accounts

- Positive Alarm Sequence
  - Pre-Signal
  - Alarm Verification
  - Drift Compensation
  - CO Alarm
  - · Hard-wired fire and trouble routing inputs and outputs
  - Modular and expandable electronics
  - Option to "invert" inputs and outputs
  - 5000 programmable cause and effects; over 50,000 inputs and outputs
  - Can be networked with programmable functionality
  - Programming via USB or PC
  - L@ti-View Graphical PC User Interface coming soon!



# **Product Overview**

The all new FireNET L@titude product range of fire alarm control equipment combines the very latest hardware and software to produce a control and indication system, which is powerful, sophisticated, but also user-friendly and intuitive. The highly flexible FireNET L@titude platform can be configured to realize many other control and indication applications, with direct integration into intelligent buildings.

Moving away from the simple, price-driven, competitive model used by most manufacturers today, the FireNET L@titude concept is designed to add value to System Designers, Integrators, Service Providers, and end users. Developed from the "ground up" using the most advanced technology available, FireNET L@titude is one of the most powerful, intelligent, and technically robust fire alarm products available.

Not only do the products and services offered under the FireNET L@titude brand provide solutions to the most technically challenging applications in life safety, FireNET L@titude will deliver added value, market advantage, and a competitive edge to your business.



# **Technical Specifications**

2 to 8 LOOP (4 SLOT) ENCL	LOSURE	
Size	Standard Cabinet - 420mm (W) x 590mm (H) x 153mm (D)	
	16.5in (W) x 23.2in (H) x 6in (D)	
	Deep Cabinet - 420mm (W) x 590mm (H) x 203mm (D) 16.5in (W) x 23.2in (H) x 8in (D)	
Construction	Mild sheet steel enclosure, 1.5 mm	
Cable Entry Knockouts	Standard Cabinet - 28 top, 19 back, 1 per side, 2 bottom	
	Deep Cabinet - 38 top, 19 back, 1 per side, 2 bottom	
Optional Semi-Flush Mounting Kit	•	
	KM5FCRD - Red KM5FCGY - Gray	
	KM5FCBS - Black	
Battery Capacity	Standard Cabinet - Up to 28 Ah (Power Sonic PS-12280)	
	Deep Cabinet - Up to 40 Ah (Power Sonic PS-12400)	
2 to 16 LOOP (8 SLOT) ENC	LOSURE	
Size	Standard Cabinet - 540mm (W) x 720mm (H) x 160mm (D)	
	21.3in (W) x 28.3in (H) x 6.3in (D) <b>Deep Cabinet</b> - 540mm (W) x 720mm (H) x 212mm (D)	
	21.3in (W) x 28.3in (H) x 8.3in (D)	
Construction	Mild sheet steel enclosure, 1.5 mm	
Cable Entry Knockouts	Standard Cabinet - 38 top, 25 back, 2 per side, 2 bottom	
	Deep Cabinet - 50 top, 25 back, 2 per side, 2 bottom	
Battery Capacity	Standard Cabinet - Up to 28 Ah (Power Sonic PS-12280)	
	Deep Cabinet - Up to 40 Ah (Power Sonic PS-12400)	
ALL MODELS		
Finish	Epoxy powder coated	
Color	Lid & Box ● Red (RAL3002) ●Gray (BS 00 A 05) ●Black (RAL9005) Fascia Signal White (RAL9003)	
Power supply voltage	120 V AC or 240 V AC	
Power supply rating at 24V DC	5.25 A (charges up to 60 Ah) 10.25 A (charges up to 100 Ah)	
Display	Full-color 800 x 480 LCD with resistive touch screen and automatic backlight dimming.	
Software zones	2000	
Software groups	5000	
Cause and Effects	5000	
Event log	10,000 events, 1 second resolution. Filterable and printable.	
Detection loops	2 - 16, added 2 at a time via dual loop panel module (S758)	
Detection loop current	400 mA each	
AUX 24V Output	2; each rated at 900 mA	
NACs	4; each rated at 2.5 A. Max 5A combined output for all channels. Class B or 2 Class A.	
Programmable Relay Outputs	5; 30 V DC 1 Amp	
Programmable Inputs	3; designed to be activated by voltage-free contacts	
Network Connection	Optional network card provides communication for networking fire control panels	
NAC Synchronization	Internal Support of System Sensor, Wheelock, Gentex, and Amseco protocols	
Printer (OPTIONAL)	40 column, front-loading thermal	
Zone LED Indicators (OPTIONAL)	Up to 3 banks of 48 (144) as standard	

# L@titude Network Vision Annunciator

LFC00NC-10 (Red), LFC00NC-40 (Gray), and LFC00NC-60 (Black)



# **Standard Features**

- Full color 7" (800 x 480 pixel) interface
- Replicates information displayed at the FACP
- Automatic display brightness adjustment
- Internal buzzer
- Connects via control panel network terminals
- Low current, 24V DC powered
- Configurable functionality
- Enable key-switch
- Sheet steel enclosure
- Surface or semi-flush enclosure options available

The FireNET L@titude Network Vision Annunciator is the most qualified annunciator on the market. It is a full-color graphical display and touchscreen and represents the most versatile annunciator for life safety systems available today. The Annunciator is a full-function fire alarm repeater that is configurable and application-flexible for use in a variety of applications, such as hospital nursing stations and elevator alarms.

FireNET L@titude Network Vision Annunciators can be configured to fully replicate fire control panel functionality, or to operate as simple, display-only devices for applications where access to fire alarm controls are inappropriate.

# **UL 268 Smoke Detector Standard 7th Edition**

A new 7th edition standard for smoke detectors will go into effect at the end of May 2020. The changes in this edition standard are major in scope, most notably the addition of three new fire tests:

- Detection of flaming polyurethane foam
- Detection of smoldering polyurethane foam
- Reduction of nuisance alarms



In addition to the fire tests, there are over 250 other changes to the current standard. Our fundamental research has determined that a new generation of detector is essential to achieve compliance.

Hochiki has concluded that single-sensor technology used today will not be able to comply with the new standards. Substantial changes have been engineered to the detector construction both inside and out. These changes include air flow, smoke chamber size and shape, sensing technology, and firmware algorithm updates.

Hochiki is committed to having our new generation of detectors (both analog and conventional) available before the May 2020 deadline. Hochiki will be announcing 5 new detectors and a beam detector. As a result, the first offerings which comply with the new standard are expected in Q4 of 2019, and the FireNET L@titude will support them immediately.



# Loop Explorer 2 Configuration Software

### **Standard Features**

- Highly configurable
- Enables customization of languages, color schemes, and company logos
- Powerful standard templates allow rapid configuration
- Cause and effect allows the configuration of large, complex networks with ease

Loop Explorer 2 (LE2) is an easy-to-use application for configuring even the most complex networks. LE2 is highlyconfigurable, enabling customization of languages, color schemes, and company logos, and allowing exposure to single or multiple detector protocols to be set for each user.

Additional logical operators for NOT and TIME functions for use in cause and effects, and the inclusion of 'groups' (collections of devices not necessarily in the same zone) increase the power and flexibility of LE2. LE2 can also be used to select the appropriate detection loop protocol. Powerful standard templates and automatic cause and effect generation allow rapid configuration of common fire system configurations for applications such as high-rise buildings or alarm verification from hotel rooms.

Cause and effect allows the configuration of large, complex networks with ease. Access to LE2 is via a secure web server, so users with the appropriate credentials have permanent access to the latest version ensuring that the most recent enhancements are always available. LE2 can be customized by the user so that language or specific terminology can be set as defaults for all systems that are configured using LE2. Custom changes can be stored on our servers, again ensuring that all authorized users have access to the latest customized version.

# L@ti-View Graphics Application

### **Standard Features**

- Reports configuration mismatch errors ensuring that the graphics system is properly maintained and updated whenever there are any panel configuration revisions
- Powerful event log filtering and reporting
- Manage the state of the fire system using a combination of graphical images and system controls
- Programmable macro buttons to perform panel control operations
- Full map navigation using configurable buttons or map areas
- Device analog value reporting
- · Perform device and zone disablements/enablements



In late 2018, Hochiki will unveil the new L@ti-View graphics system. This professional-grade graphics system will complement the new generation of FireNET L@titude Fire Alarm Control Panels, while also being backward-compatible with the current analog product.

L@ti-View enables the creation of a 2D map of any site or building to monitor fire safety and detection, and automatically switches to an area where a fire device has been activated to allow immediate viewing and investigation of an event. It will also display the relevant emergency assembly and fire control points.

Fully-configurable on-site using an administrator login, L@ti-View supports dual screens allowing a dedicated screen for the 2D graphic map and a separate screen for system management. It also reports any configuration errors, ensuring that the graphics system is maintained and updated whenever the panel configuration is revised.

Expect to see previews of the system in training classes later this year!

# **Panel Model Numbers**

### LV 103H# -14 (abcd)

LV, J, U, 3, H#, -J,4, (abcd) If to peripheral cards are ordered, this peripheral cards are ordered,		
Panel Options	Valid Entries	Description
Product Style	LA	FireNET L@titude Fire Alarm Control Panel
	LF	FireNET L@titude Network Vision Annunciator
	1	4 Slot Standard Enclosure
	2	4 Slot Standard Plex-Door Enclosure
	3	4 Slot Deep Enclosure
	4	4 Slot Deep Plex-Door Enclosure
	5	4 Slot Extra Deep Guard Station Enclosure - FUTURE ENHANCEMENT
Enclosure Style	6	4 Slot 19" Rack Mount Enclosure - FUTURE ENHANCEMENT
	7	8 Slot Standard Enclosure - 16 Loop
	8	8 Slot Standard Plex-Door Enclosure - 16 Loop
	9	8 Slot Deep Enclosure - 16 Loop
	A	8 Slot Deep Plex-Door Enclosure - 16 Loop
	С	Annunciator
	0	English
	1	Portuguese
Language	2	Spanish
	3	Taiwanese
	0	None
Power Supply	1	5.25 A 115V
	2	5.25 A 230V
	3	10.25 A (auto-voltage sensing)
	00	Not Fitted
	NC	Network Module only (Network Vision Annunciator)
Loop Modules & Communication Modules	H#	2-Loop Panel Module, Hochiki Protocol
	I#	2-Loop Panel Module, Hochiki Protocol, and Media Gateway™
	J#	2-Loop Panel Module, Hochiki Protocol, and Network Module
	K#	2-Loop Panel Module, Hochiki Protocol, Network Module, and Media Gateway™
Cabinet Color	1	Red (RAL3002)
	4	Gray (BS 00 A 05)
	6	Black (RAL9005)
	0	No Printer / No Zone LEDs
	1	No Printer / No Zone LEDs, Blank 2nd Aperture
Drinter Zeral CD	3	Printer / No Zone LEDs
Printer, Zone LEDs & Aperture	4	Printer / 48 Zone LEDs
	5	No Printer / 48 Zone LEDs
	6	No Printer / 96 Zone LEDs
	7	No Printer / 144 Zone LEDs
Optional Peripheral Cards	а	16 Channel I/O Panel Module (S772) - FUTURE ENHANCEMENT
	b	8 Channel Relay Panel Module (S791)
	С	8 Channel Conventional Zone Module (S792) - FUTURE ENHANCEMENT
	d	4 Channel NAC Module (S793) - FUTURE ENHANCEMENT

# **OPTIONAL PANEL PERIPHERALS**













### Dual Loop Panel Module (S758)

The Dual Loop Panel Module monitors loop device status and provides status to the panel processor. It holds device configurations and operates in a standalone manner when catastrophic failures occur.

### 16 Channel I/O Interface Card (S560)

The 16 Channel I/O Interface enhances the versatility of the alarm system by providing additional input and output capabilities to the panel. Inputs or outputs can be selected for up to 16 individual channels, and are configured in the same way as devices connected to addressable loops of the panel. The 16 Channel I/O Interface can be configured to contribute or act upon cause and effect logic. *NOTE Mounting cabinet K0770-XX required.* 

### Media Gateway Panel Module (S788)

The Media Gateway Panel Module provides connectivity to monitoring centers using IP (Sur-Gard), or dial-up connectivity. The Media Gateway may also be used to meet integration application requirements.

### 8 Channel Relay Panel Module (S791)

The 8 Channel Relay Panel Module has 8 voltage-free changeover relay contacts, each of which can be individually programmed. All outputs are configurable in the same way as devices connected to the loops and all may be acted upon by cause and effect logic. These boards are typically used in applications which require more than the five standard relay outputs, such as signaling to other systems or plant control.

### Network Module (S723)

The FireNET L@titude Network Module provides enhanced highspeed communication for networking fire control panels. The network provided by this module can support combinations of panels and annunciators. FireNET L@titude Fire Alarm Control Panels can receive events from other panels in the network. The Class X networking used in conjunction with the Network Module provides tolerance against open and short circuit trouble conditions.

### Printer (S768)

The printer is an optional feature for printing fire system events as they occur. The printer is located on the fascia, below the Zone LEDs (if present). It is a thermal printer, printed on heatsensitive paper rolls and never requires replacement ink. A trouble message is reported when the paper runs out. The printer includes a front-loading feature for replacing paper rolls.

# **OPTIONAL PANEL PERIPHERALS**









### Zone LED Module (S771)

The Zone LED module contains 48 LEDs and is connected to the LCD Main Processor Board of the FireNET L@titude Fire Alarm Control Panel. A maximum of three Zone LED modules can be connected to provide the fascia with 144 Zone LED indicators.

### 5.25 A Power Supply (S406)

5.25 Amp power supplies are capable of charging batteries with capacities ranging from 7 to 60 Ah. The power supply accepts input voltages of 115 VAC or 230 VAC. The 5.25A power supply supplies 4A for panel power and 1.25A for battery charging.

### 10.25 A Power Supply (S408)

10.25 Amp power supplies are capable of charging batteries with capacities ranging from 12 to 100 Ah. The power supply accepts input voltages of 115 VAC or 230 VAC. The 10.25A power supply supplies 8A for panel power and 2.25A for battery charging.

### FUTURE ENHANCEMENTS - COMING SOON!

### 4 Channel NAC Panel Module (S793)

FUTURE ENHANCEMENT

Additional NAC output capability can be added to by using 4 Channel NAC Modules. These boards have 4 supervised NAC outputs, each of which can be individually programmed. The circuits can be configured for class A or B operation. These circuits can be configured to act upon cause and effect logic.

### 8 Channel Conventional Zone Panel Module (S792)

### FUTURE ENHANCEMENT

The 8 Channel Conventional Zone Panel Module has 8 supervised detection circuits (Class B). Each circuit can support up to 20 conventional detectors and approved devices. Individual circuits may be configured for trigger resistor or short circuit activation. These circuits may be used for any of the standard input actions and can be configured to contribute to cause and effect logic. Each pair of circuits can be joined to form a single Class A configuration.



### 16 Channel I/O Interface Panel Module (S772)

FUTURE ENHANCEMENT

The 16 Channel I/O Interface Panel Module will provide the same functionality as the 16 Channel I/O Interface Card, with the convenience of a plug-in-module.





# **POPULAR CONFIGURATIONS**

# **4 SLOT MODELS**



# **4 Slot Base Model**

The base model of the FireNET L@titude Fire Alarm Control Panel is equipped with a generous quantity of notification appliance circuits, relays, and inputs, and can be further increased by the addition of up to four I/O panel modules.

The large graphical touch screen provides a clear and intuitive interface requiring minimal training. Up to 80 character zone location and device messages allow a precise description of each detection device location to be configured. The resistive touch screen allows controls to be available, even when wearing protective gloves.

Access to the menu and control functions is provided by a unique passcode or by the optional key switch. Up to 64 individual login accounts can be configured, with different profiles and access permissions.

All models of the FireNET L@titude Fire Alarm Control Panel are available in 3 colors (red, gray, or black), with an optional deep cabinet, and two power supply options. Refer to the datasheet above for specific details on these options.

# **4 Slot Double Aperture with Zone LEDs and Printer**

This configuration is equipped with everything that the Single Aperture panel has, but also has optional Zone LEDs and an optional Printer.

The Zone LED module contains 48 LEDs and is connected to the LCD Main Processor Board of the FireNET L@titude Fire Alarm Control Panel. A maximum of three Zone LED modules can be connected to provide the fascia with 144 Zone LED indicators.

The FireNET L@titude Printer is a 40 character front loading thermal printer that prints all events as they occur. The printer can also be used to print all/selected event log entries.





# **4 Slot Double Aperture with Plex-Door**

This Plex-Door version of the FireNET L@titude panel is equipped with a plexiglass window to meet the requirements of some major cities. Access Level 2 is enabled when the outer door of the enclosure is unlocked.

# **POPULAR CONFIGURATIONS**

# **8 SLOT MODELS**

# **8 Slot Base Model**

The base model of the FireNET L@titude Fire Alarm Control Panel is equipped with a generous quantity of notification appliance circuits, relays, and inputs, and can be further increased by the addition of up to eight I/O panel modules.

The large graphical touch screen provides a clear and intuitive interface requiring minimal training. Up to 80 character zone location and device messages allow a precise description of each detection device location to be configured. The resistive touch screen allows controls to be available, even when wearing protective gloves.

Access to the menu and control functions is provided by a unique passcode or by the optional key switch. Up to 64 individual login accounts can be configured, with different profiles and access permissions.

All models of the FireNET L@titude Fire Alarm Control Panel are available in 3 colors (red, gray, or black), with an optional deep cabinet, and two power supply options. Refer to the datasheet above for specific details on these options.





# **8 Slot Double Aperture with Printer**

This configuration is equipped with everything that the base model panel has, but also has an optional Printer.

The FireNET L@titude Printer is a 40 character front loading thermal printer that prints all events as they occur. The printer can also be used to print all/selected event log entries.

# 8 Slot Double Aperture with Zone LEDs and Printer

This configuration is equipped as above, but also has an optional Zone LED module.

The Zone LED module contains 48 LEDs and is connected to the LCD Main Processor Board of the FireNET L@titude Fire Alarm Control Panel. A maximum of three Zone LED modules can be connected to provide the fascia with 144 Zone LED indicators.



# **SLC DEVICES**



# **SLC DEVICES**



FAST RESPONSE CONTACT MODULES

FRCME-M, FRCMA-P, FRCME-4, FRCMA-I, FRCMA-PI, FRCME-S, FRCME-P, FRCMA

The Contact Modules are designed to be used with pull stations, water flow switches, and other applications requiring the monitoring of dry contact alarm initiating devices.



SHORT CIRCUIT ISOLATOR

SCI

The Short Circuit Isolator provides the capability of allowing NFPA SLC Style 7 installations and checks the line for short circuit at power up; if the line is normal, the relay will be returned on. If a line short is detected, the relay remains open.



SUPERVISED OUTPUT MODULES SOM, SOM-A, SOM-AI, SOM-R

Supervised Output Modules have been designed to provide application flexibility and quick response to emergency conditions. Flexibility is provided by a wide range of operating modes, including supporting multi-zone operations, and/or functions, up to 16 different modulation patterns and multi-state programming.



DUAL RELAY MODULES

R2ML (Low Voltage) R2ML-I (Low Voltage w/ Isolator) R2MH (High Voltage) R2MH-I (High Voltage w/ Isolator

The Dual Relay Modules have been designed to provide flexible and quick response to emergency conditions. They allow independent control of two form C contacts for a variety of normally open and normally closed contact applications such as fan operation, elevator recall, door closure, and auxiliary notification.



DUAL INPUT MONITOR MODULE

The Dual Input Monitor Module provides an economical approach to monitor devices in the same proximity, such as water flow and valve supervision on the same interface device.



CONVENTIONAL ZONE MODULE

CZM

The Conventional Zone Module provides the ability to upgrade locations on a phased approach or monitor a zone of conventional detectors. This capability is key to satisfying customer needs for a system upgrade over time, and allows a best case application of technology to match the upgrade with the customer's budget.



ANALOG DUCT SENSORS

DH-99-A (without relays) DH-99-AR (with relays)

Analog Photoelectric Duct Smoke Sensors provide early detection of smoke and products of combustion present in air moving through HVAC ducts in Commercial, Industrial, and Residential applications.

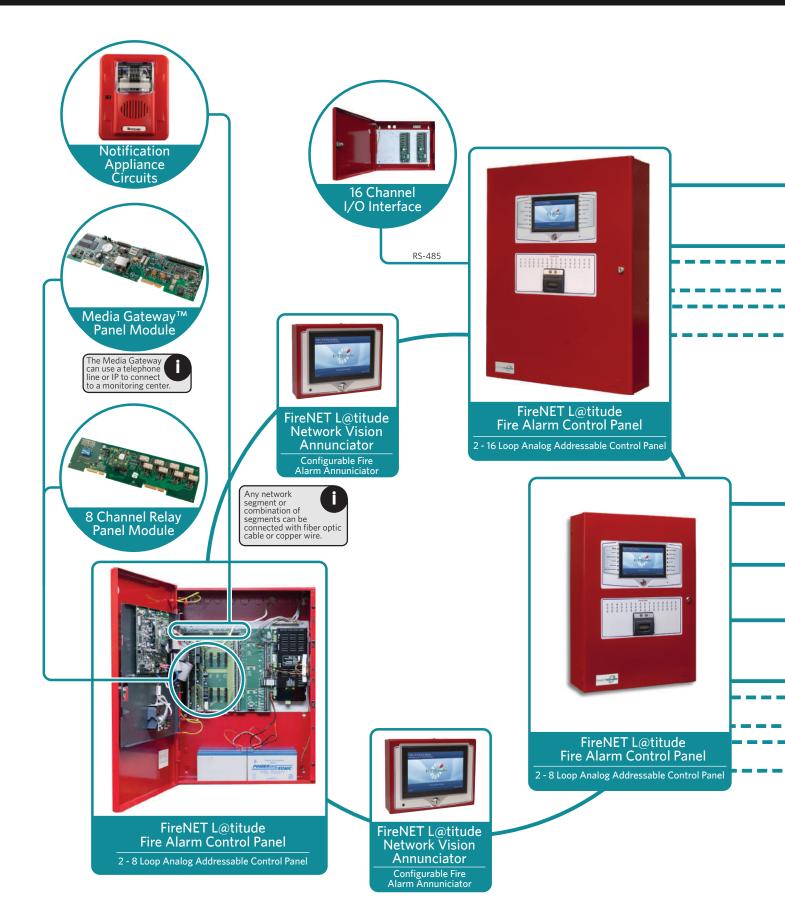


ANALOG DUCT SENSOR REMOTE ACCESSORIES

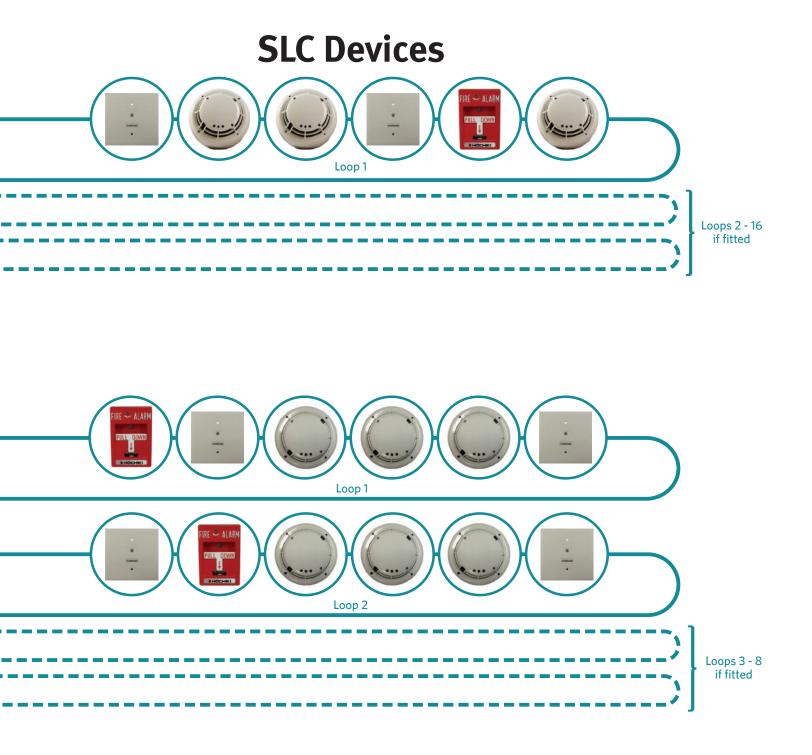
> MS-RH/KA/P/R MS-RA/R MS-RA/P MS-KA/P/R

The Remote Accessories are designed to be used with the analog Duct Sensors to provide audible and visual indication as well as remote test / reset functions. These devices are constructed of attractive, yet durable brushed stainless steel and mount on a standard single or double gang electrical backbox.

# **NETWORK SCHEMATIC**



# **NETWORK SCHEMATIC**







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